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Trends in Developing Country Exports, 1963-88

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Contrary to earlier theories, developed countries' imports from developing countries tend to grow faster than the developed countries' gross domestic product. And despite the alleged increase in developed countries' import barriers after 1973, their imports from developing countries have accelerated. Exports have grown most rapidly among outward-oriented developing countries.

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Ragnar Nurkse and, subsequently, Raul Prebisch and Gunnar Myrdal expressed the view that developed countries' imports from developing countries tend to increase less rapidly than the developed countries' gross domestic product. It has been further suggested that this situation is aggravated by the decline of economic growth rates in developed countries and by their protectionist policies toward imports from developing countries. The conclusion has been reached that developing countries do not have favorable prospects in developed country markets.

The results that Balassa presents conflict with the earlier claims. His results indicate that developed countries' imports from developing countries tend to grow faster than the developed countries' gross domestic product. And despite the alleged increase in import barriers in developed countries after 1973, the growth of developing countries' exports to these countries accelerated during the period. A 1 percent rise in the gross domestic product of developed countries was associated with a 1.2 percent increase in their nonfuel imports from the developing countries in 1967-73, and the corresponding estimate is 2.6 percent for 1973-88.

Among groups of developing countries, exports grew more rapidly in countries that pursued outward-oriented policies. In turn, continual inward orientation led to losses in export market shares. These results are reinforced when individual countries are considered.

At the same time, the product composition of developing countries' exports of manufactured goods exhibits a considerable upgrading of exports between 1963 and 1988. There was a shift from wood products and furniture and the group of other industries to engineering products as well as changes in the product composition of several product categories.

Despite the operation of the Multifibre Arrangement (MFA), developing countries' exports of textiles and clothing grew only slightly less than the total manufactured exports of these countries. And the exports of wearing apparel that were supposed to be particularly affected by MFA limitations grew more rapidly than the overall average.

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TRENDS IN DEVELOPING COUNTRY EXPORTS, 1963-88

Bela Balassa *

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Trends in Developing Country Exports, 1963-88

Bela Balassa

I. Introduction

Ragnar Nurkse and, subsequently, Raul Prebisch and Gunnar Myrdal expressed the view that developed country imports from the developing countries have a tendency to increase less rapidly than their gross domestic product. More recently, the view has been expressed that developed countries have raised their barriers to imports from the developing countries, thereby reducing the growth rate of their imports from these countries. In support of this proposition, data have been presented on the range of products subject to nontariff barriers (Laird and Yeats, 1988).

It has further been suggested that the situation is aggravated by the decline in economic growth rates in the developed countries. The conclusion has been reached that developing countries do not have favorable prospects for exporting to developed countries.

In the present paper, these propositions will be subjected to scrutiny. This will be done by contrasting data on developing country exports to the developed countries in the periods 1963-73 and 1973-88. The year 1973 may be considered a watershed, in part because oil price increases have been followed by lower economic growth rates in the developed countries, and in part because it is since 1973 that increases in developed country import barriers have been alleged.

These data will be presented following a comparison of developed and developing country export growth. Data on changes in the terms of trade of the developing countries and in their import capacity will also be provided (Section II).

In the discussion, emphasis will be given to nonfuel exports, which will be disaggregated into nonfuel primary exports (foods and beverages, industrial materials, and nonferrous metals) and manufactured goods. Data will also be presented on fuels and on total exports.

The same classification scheme will be used in a regression analysis designed to indicate the relationship between developing country exports to developed countries and developed country GDP as well as relative prices. It will further be explored if the underlying relationships changed between the two periods under consideration (Section III).

Next, developing countries will be disaggregated according to their level of development and geographical location. The groups in question include newly industrializing countries in Latin America, Far East, Middle East and Southern Europe, and South Africa; newly exporting countries in Latin America, Far East, North Africa and Middle East, and South Asia; and less developed countries in China, Latin America, Asia, Middle East, and Africa, (Section IV).

Information will further be provided on the exports of selected developing economies. They include Korea, Singapore, Taiwan (China), Argentina, Brazil, Mexico, India, Chile, and Uruguay (Section V).

Developing country exports of manufactured products will also be disaggregated into major commodity categories. They are textiles, apparel, and leather; wood products and furniture; paper and paper products; chemicals; non-metallic mineral products; iron and steel; engineering products; and other

industries (Section VI).

II. Trends in Exports and the Terms of Trade

Table 1 provides information on the geographical and commodity composition of the exports of developed and developing countries in the years 1963, 1973, and 1987, expressed in 1975 prices. In the entire 1963-87 period, nonfuel exports increased four-and-a-half times in the developed countries and slightly more than fivefold in the developing countries.

These results conceal differential trends in the 1963-73 and 1973-87 periods. In the first period, developed country exports of nonfuel products increased two-and-a-half times while developing country exports rose by only two-thirds. In the second period, less than doubling of developed country exports was accompanied by a threefold rise in developing country exports.

Differences are shown also in the export performance of the two groups of countries in manufactured goods and in nonfuel primary products. In the entire 1963-87 period, the manufactured exports of the developed countries increased fivefold while developing country exports rose twentyfold. As a result, the share of manufactured goods in the nonfuel exports of the developing countries increased from 15 percent in 1963 to 62 percent in 1987.

In turn, the nonfuel primary exports of the developed countries increased three-and-a-half times while developing country exports hardly more than doubled. These results, in part, reflect the unfavorable commodity composition of developing country exports: they have a much larger share in industrial materials, which experienced slow increases in world exports than in foods and beverages, for which increases exceeded the average for nonfuel products.

At the same time, there has been some decline in the share of

developed countries as markets for the nonfuel exports of the developing countries. This share was 73 percent in 1963, 70 percent in 1973, and 66 percent in 1987. The results reflect the fact that economic growth rates were higher in the developing countries than in the developed countries.

The fuel exports of the developing countries rose more rapidly than their nonfuel exports in the 1963-73 period. Between 1973 and 1987, however, they experienced a decline by four-tenths. This is explained in part by reductions in fuel consumption in the developed countries in response to higher prices and in part by their increased production of fuels at the higher prices.

Adverse trends in fuels explain that the total exports of the developing countries only tripled, compared with a four-and-a-half times increase in the developed countries. This figure is, however, of limited interest as it combines changes in the high-income oil producing countries of the Middle East and in the oil-importing developing countries. Thus, the following discussion of growth rates focuses on nonfuel exports.

The nonfuel exports of the developing countries to the developed countries increased 6.0 percent a year between 1963 and 1973 and 7.1 percent a year between 1973 and 1987.¹ An acceleration of export growth occurred, notwithstanding the fact that economic growth rates in the developed countries decelerated, from 4.8 percent in the 1963-73 period to 2.5 percent in the 1973-87 period.

Even larger increases in growth rates are shown for nonfuel primary exports, from 2.5 percent to 3.3 percent. This is explained by the rise in growth rates for food and beverages: 1.7 percent in 1963-73 and 4.2 percent in

¹ These estimates are based on the import data of the developed countries.

1973-87. By contrast, growth rates declined in industrial materials (3.0 percent and 1.7 percent) and in nonferrous metals (4.8 percent and 3.5 percent).

The growth rates of manufactured exports also fell in the developing countries. The decrease was from 21.3 percent in 1963-73 to 11.4 percent in 1973-87 as the torrid pace of the first period could not be maintained.

The terms of trade of the developing countries for their nonfuel exports to the developed countries rose by 11 percent between 1963 and 1973. Their terms of trade declined, however, by 21 percent between 1973 and 1987. For the entire 1963-1987 period, the fall of the developing countries' terms of trade was 13 percent.

Further interest attaches to calculations on the import capacity of the developing countries in their trade in nonfuel products with the developed countries, derived as the index of the volume of their nonfuel exports to the developed countries multiplied by the terms of trade index. The volume of exports rose by 59 percent between 1963 and 1973 and by 193 percent between 1973 and 1987, with a total increase of 365 percent. Correspondingly, the import capacity of the developing countries in trade in nonfuel products with the developed countries increased by 76 percent between 1963 and 1973 and by 131 percent between 1973 and 1987, with a total rise of 306 percent. Thus, despite the deterioration of their terms of trade, the growth of the import capacity of the developing countries accelerated after 1973.

III. An Econometric Investigation of Developed Country Imports from the Developing Countries

The relationship between economic growth in the developed countries and their imports from the developing countries has been analyzed by the use of regression analysis, with the addition of price variables. The statistical

formulation assumes that the causation goes from economic growth in the developed countries to their imports from the developing countries. In view of the small share of trade with the developing countries in developed country GDP (2 percent in 1984) one may neglect the possibility of reverse causation.²

The estimates reported in Table 2 show that in the 1963-88 period a one percent increase in the gross domestic product of the developed countries was associated with a 1.9 percent rise in their imports of nonfuel products from the developing countries.³ This result, then, conflicts with the claims made by Nurkse, Prebisch, and Myrdal according to whom developed country imports from the developing countries would increase less rapidly than their gross domestic product.

The estimates of Table 2 further show that in the 1963-88 period a one percent rise in the GDP of the developed countries was associated with a 4.0 percent increase in their imports of manufactured goods, and a 0.7 percent rise in their imports of nonfuel primary products, from the developing countries. The corresponding estimates are 0.8 percent for foods and beverages, 0.5 percent for industrial materials, and 1.2 percent for nonferrous metals. The estimate is 0.6 percent for fuels; the latter coefficient is statistically significant at the 10 percent level.

The empirical results further indicate the effects of changes in relative prices on the imports of the developed countries from the developing countries. This has been done by relating price indices for developing country exports of the various product groups to the price index of the developed

² On the effects of supply factors, see below.

³ Unless otherwise noted, all estimates are statistically significant at the 1 percent level.

countries' manufactured exports.

The estimates reported in Table 2 show that a one percent increase in developing country export prices, relative to the manufactured export prices of the developed countries, leads to a 0.5 percent decline in their nonfuel exports to the developed countries. The estimated coefficient is statistically significant at the 5 percent level.

The corresponding estimates are 0.9 percent for manufactured goods, 0.5 percent for nonfuel primary products, 0.7 percent for foods and beverages, 0.2 percent for industrial materials, 0.1 percent for nonferrous metals, and 0.2 percent for fuels. However, the estimates for industrial materials and nonferrous metals are not statistically significant and the significance level of the estimate for fuels is 5 percent.

In view of the claims made about increasing import barriers in the developed countries, further interest attaches to regression results for the periods 1963-73 and 1974-88. The results reported in Tables 2a and 2b show that a one percent increase in the gross domestic product of the developed countries was associated with a 1.2 percent rise in their nonfuel imports from the developing countries in the 1963-73 period and a 2.6 percent rise in these imports in the 1974-88 period. The corresponding figures are 3.6 percent and 4.0 percent for manufactured goods and 0.6 percent and 1.1 percent for nonfuel primary products.

These results appear to show that the import barriers of the developed countries are quite malleable. While supply factors in the developing countries have affected the results, the estimates indicate that developed country markets have been relatively open to imports from the developing countries.

This result obtains not only for manufactured goods but also for nonfuel primary products. In fact, the estimate of 1.1 percent indicates that in the 1974-88 period the Nurkse-Prebisch-Myrdal proposition does not apply to nonfuel primary products either. The same observation pertains to foods and beverages, industrial materials, and nonferrous metals, taken individually.

By contrast, a one percent increase in the gross domestic product of the developed countries was associated with a 1.8 percent rise in their imports of fuels from the developing countries in 1963-73 and by a 1.3 percent decline in these imports in 1974-88. The results may be explained by the considerations introduced in Section II.

At the same time, the question arises if the differences obtained in the GDP coefficients for the 1963-73 and 1974-88 periods are statistically significant. This is the case for nonfuel products and, at varying levels of significance, for nonfuel primary products, foods and beverages, industrial materials, and fuels. The differences in the results for manufactured goods and for nonferrous metals are not statistically significant, however (Table 2c).

It is apparent, then, that economic growth in the developed countries is associated with a more than proportional increase in their nonfuel imports from the developing countries. The rise in these exports, in turn, contributes to economic growth in the latter group of countries.

The relationship between the exports of developing countries and their gross domestic product has been estimated for the 1963-87 period. The results show that a one percent increase in the nonfuel exports of the developing countries to the developed countries raises the former's GDP growth rate by 0.73 percentage points. The regression coefficient is statistically significant at

the 1 percent level.

It thus appears that the increase in the growth rate of the nonfuel exports of the developing countries to the developed countries from 6.0 percent in 1963-73 to 7.1 percent in 1973-87 added 0.8 percentage points to the GDP growth rate of the developing countries. This result contradicts statements made about the unfavorable consequences of developed country economic performance on the developing countries.

IV. Export Performance for Groups of Developing Countries

Further interest attaches to the export performance of different groups of developing countries. For this purpose, distinction has been made among newly industrializing countries (NICs), newly-exporting countries (NECs), and less developed countries (LDCs), with a further breakdown based on geographical location. Table 3 provides the results obtained for the years 1963, 1973, 1980, and 1988.

In an earlier study by the author, newly-industrializing countries were defined as countries having a share of manufacturing value added in the gross domestic product of 20 percent or higher in 1977 and per capita incomes of at least \$1100 in 1978. The same list of countries is obtained by applying the 20 percent benchmark to 1984 and using a per capita income figure of \$1700 for that year (Balassa, 1987).⁴

The newly-exporting countries have been defined by the joint requirement that the share of manufacturing value added in GDP was at least 15 percent or manufactured goods accounted for at least 30 percent of their exports and manufactured exports reached \$250 million, i.e. 0.03 percent of world

⁴ This is the lower limit for upper middle-income countries in World Bank, World Development Report 1986, Table 1.

manufactured exports, and 0.2 percent of manufactured exports by the developing countries, in 1984.⁵

Limiting attention to nonfuel products, the results show that the market share of the Far Eastern NICs (Hong Kong, Korea, Singapore, and Taiwan, China) in the combined exports of the developing countries rose from 3.9 percent in 1963 to 17.2 percent in 1973, to 23.4 percent in 1980, and to 31.6 percent in 1988. Three other areas show increases in their shares between 1963 and 1988. They are the Middle Eastern and Southern European NICs (Greece, Israel, Portugal, Spain, Turkey, and Yugoslavia), from 10.7 percent to 17.1 percent; the Far Eastern NECs (Indonesia, Malaysia, Philippines and Thailand), from 6.0 percent to 9.8 percent; and China from 1.4 percent to 6.5 percent.

Moderate declines were experienced by the Latin American NICs (Argentina, Brazil, Chile, Mexico, and Uruguay), from 20.2 percent to 15.0 percent, and the Middle Eastern LDCs, from 1.4 percent to 1.3 percent. Finally, the decline exceeded 50 percent in South Africa, from 6.0 percent to 2.4 percent; in the Latin American NECs (Colombia, Costa Rica, Guatemala, Peru, and Venezuela), from 7.1 percent to 2.5 percent; the South Asian NECs (Bangladesh, India, Pakistan, and Sri Lanka), from 8.0 percent to 3.5 percent; the North African and Middle Eastern NECs (Egypt, Jordan, Morocco, and Tunisia), from 3.3 percent to 1.5 percent; the Latin American LDCs, from 7.8

⁵ Alternative definitions of the newly-exporting countries are provided by Havrylyshyn and Alikhani (1982) and by Hughes and Newbery (1986). The former include countries with manufactured export growth rates in excess of average growth rates by the NICs during the 1970s; the latter include countries with populations in excess of 10 million and per capita incomes of at least \$750 in 1983. Both of these definitions have the disadvantage of excluding India, whose manufactured exports exceed that of any newly-exporting country, and Pakistan whose manufactured exports also surpassed that of the majority of the NECs.

percent to 3.2 percent; the Asian LDCs, from 6.0 percent to 1.1 percent; and the African LDCs, from 18.2 percent to 4.5 percent.⁶

Among major product groups, changes in export market shares were the largest for manufactured goods. Although the Far Eastern NICs had a relatively high export share of 21.9 percent in these products already in 1963, they increased their share to 44.4 percent in 1988. Large increases were also experienced by the Far Eastern NECs, from 2.7 percent to 6.7 percent, and by China, from 2.9 percent to 7.0 percent. They were followed by the Latin American NICs whose share increased from 7.4 percent in 1963 to 11.3 percent in 1988.

Relatively small declines were shown in the Middle Eastern and Southern European NICs, from 22.2 percent to 18.1 percent, followed by the Latin American NECs, from 1.4 percent to 0.8 percent, and the North African and Middle Eastern NECs, from 1.8 percent to 1.2 percent. In turn, declines were large in South Africa, from 5.9 percent to 1.1 percent; the South Asian NECs, from 18.9 percent to 3.8 percent; the Latin American LDCs, from 4.7 percent to 1.9 percent; the Asian LDCs, from 16 percent to 0.8 percent; the Middle Eastern LDCs, from 3.2 percent to 1.4 percent; and the African LDCs, from 5.4 percent to 1.6 percent.

The Far Eastern NICs also made large gains in nonfuel primary products, from 1.9 percent in 1963 to 6.9 percent in 1988, followed by the Far Eastern NECs, from 6.3 percent to 16.0 percent. Even larger gains were shown by China, from 1.2 percent to 5.7 percent. However, just as in manufactured goods, the market share of all the LDC groups declined (Latin America, from 8.1 percent to 5.8 percent; Asia, from 6.5 percent to 1.6 percent; Middle East, from

⁶ The composition of the LDC group is not provided. They include all countries not listed among the NICs and NECs of the particular area.

1.2 percent to 1.1 percent; and Africa, from 19.7 percent to 10.1 percent). Finally, in 1963 and 1988 nonfuel primary export shares were 21.7 percent and 22.2 percent in the Latin American NICs; 9.4 percent and 15.0 percent in the Middle Eastern and Southern European NICs; 6.0 percent and 5.1 percent in South Africa; 7.8 percent and 5.9 percent in the Latin American NECs; 3.5 percent and 2.0 percent in the North African and Middle Eastern NECs; and 6.7 percent and 2.8 percent in the South Asian NECs.

The described changes are closely related to the policies applied. Among the NICs, the four Far Eastern economies began a policy of outward orientation in the early 1960s and continued with this policy afterwards. It is noteworthy that these economies made gains in manufactured goods and nonfuel primary products as well.

The Latin American NICs applied inward-oriented policies and while they reformed these policies in the second half of the 1960s, leading to substantial increases in their manufactured exports, a reversal occurred after the oil crisis. These countries again gained export market shares after 1980 when they undertook large devaluations in response to the debt crisis.

In the Middle East-Southern Europe area, Spain, Portugal, and Turkey undertook far-reaching policy reforms while lesser changes were made in Greece, Israel, and Yugoslavia. At the same time, these countries benefited from membership or association agreements with the European Common Market. In turn, sanctions against South Africa explain the large decline in export market shares after 1980.

The Far Eastern NECs followed the Far Eastern NICs in adopting outward-oriented policies. The South Asian NECs are dominated by India that continued with inward orientation. Among the other countries of the group, Sri

Lanka carried out policy reforms in the latter half of the period but it is too small to affect the average. In turn, the unfavorable results for the North African and Middle Eastern NECs are largely explained by the fact that Egypt failed to productively utilize the bonanza provided by increased oil earnings, toll receipts from the Suez Canal, and workers' remittances from the oil-exporting Middle Eastern countries. Finally, the Latin American NECs continued with import substitution-oriented policies during the period under consideration.

In China, export shares nearly tripled between 1980 and 1988, when economic reforms were undertaken. These reforms included decentralization in agriculture and, to a lesser extent, industry. In fact, increases in export market shares were the largest in nonfuel primary products, followed by manufactured goods.

All less developed country groups experienced losses in export market shares in manufactured goods as well as in nonfuel primary products during the period under consideration. These losses are explained by the failure of these countries to turn outward. In fact, it is largely their policy failures that kept these countries in an underdeveloped state, although in Sub-Saharan Africa the low initial level of development also contributed to this outcome.

V. Individual Country Performance

The following discussion concerns nine developing economies that have established basic industries by the beginning of the period and may be considered representative of alternative policy regimes. In the 1963-73 period of rapid growth in the world economy, a contrast may be drawn among three groups: economies pursuing outward-oriented policies (Korea, Singapore, Taiwan, China); inward-oriented developing economies undertaking policy reforms (Argentina, Brazil, and Mexico); and developing economies characterized by continued inward

orientation (India, Chile, Uruguay). In the 1973-88 period of external shocks, the first group of outward-oriented economies maintained their policy stance; the three large Latin American countries again turned inward in response to external shocks; India maintained its inward-oriented policies while Chile and Uruguay turned outward after 1973 but subsequently appreciated their exchange rate that discriminated against exports.

The policies applied importantly influenced changes in export market shares. In the first group, Korea increased its market share from 1.2 percent in 1963 to 12.1 percent in 1973 in the combined nonfuel exports of the nine economies while the corresponding figures for Taiwan, China are 4.6 percent and 16.6 percent (Table 4).

The data for Singapore reported in Table 4 are not comparable because they include re-exports. Thus, the decline in its market share in nonfuel exports from 12.9 percent in 1963 to 10.9 percent in 1973 is explained by the fall in re-exports. From national economic statistics, it appears that the share of Singapore's own exports in the total for the nine economies increased from 1.1 percent in 1963 to 4.6 percent in 1973.

Korea and Taiwan, China experienced very large increases in manufactured exports in the 1963-1973 period, with their market shares rising from 2.6 percent to 21.0 percent and from 8.4 percent to 28.5 percent, respectively. But they also had large increases in their nonfuel primary export shares between 1963 and 1973; from 0.8 percent to 3.5 percent in the first case and from 3.6 percent to 5.1 percent in the second. Outward orientation thus benefited manufactured as well as nonfuel primary exports.

Among the three large Latin American countries, policy changes after 1966 were the most far-reaching in Brazil, leading to increases in its market

share in nonfuel exports from 19.8 percent in 1963 to 23.0 percent in 1973. The increases were concentrated in manufactured exports, which received considerable subsidies, with Brazil's share rising from 3.0 percent to 10.4 percent. But subsidies were provided also to nonfuel primary exports where Brazil's share rose from 24.0 percent to 35.2 percent.

Policy changes were less extensive in Argentina and in Mexico, both of which experienced losses in nonfuel export market shares; 1963 and 1973 shares were 19.1 percent and 12.3 percent in the first case and 11.3 percent and 9.5 percent in the second. Both countries lost market shares in nonfuel primary products; Argentina gained, and Mexico lost, market shares in manufactured goods.

The largest declines occurred, however, in the three economies that continued with inward orientation throughout the period. Nonfuel export market shares fell from 21.7 percent to 11.0 percent in India; from 7.1 percent to 3.4 percent in Chile, and from 2.3 percent to 1.2 percent in Uruguay, between 1963 and 1973.

It is particularly noteworthy that India's market share in manufactured exports decreased from 45.5 percent in 1963 to 12.2 percent in 1973. In this connection, it may be recalled that India's inward oriented policy stance was rationalized on the grounds that "there are no markets abroad." Yet, the combined manufactured exports of the nine developing economies increased from \$3.2 billion to \$16.3 billion between 1963 and 1973 while Indian exports rose only from \$1.5 billion to \$2.0 billion. ⁷

The export market shares of the three Far Eastern economies continued to rise after 1973 as they maintained their outward-oriented policy stance.

⁷ Data have been expressed in 1975 prices.

Between 1973 and 1988, market shares in nonfuel exports increased from 12.1 percent to 25.4 percent in Korea, from 10.9 percent to 14.8 percent in Singapore, and from 16.6 percent to 25.5 percent in Taiwan, China.

Increases were concentrated in manufactured goods where Korea's share rose from 21.0 percent to 30.7 percent, Singapore's from 13.0 percent to 15.8 percent, and Taiwan's from 28.5 percent to 30.1 percent. But increases occurred also in nonfuel primary products, except for Singapore where the share of re-exports declined. Both Korea's and Taiwan's share in this product group doubled between 1973 and 1988.

The return towards inward orientation after 1973 led to a decline in the export market shares of the three large Latin American countries. Between 1973 and 1980, the share in the nonfuel exports of the nine economies declined from 12.3 percent to 7.9 percent in Argentina, from 23.0 percent to 20.3 percent in Brazil, and from 9.5 percent to 5.2 percent in Mexico. These declines continued after 1980 in Argentina and Brazil, reaching 4.5 percent in the first case and 14.3 percent in the second in 1988. A small increase, to 6.0 percent took place, however, in Mexico that depreciated its exchange rate in real terms to a considerable extent. Parallel changes occurred in nonfuel primary exports and in manufactured exports, except that in Mexico's case the increase in exports was concentrated in manufactured goods.

In line with its continued inward orientation, India lost export market shares in both the 1973-80 and the 1980-88 periods. Its share in the nonfuel exports of the nine economies fell from 11.0 percent in 1973 to 7.7 percent in 1980 and, again, to 6.2 percent in 1988. The decline was especially pronounced in manufactured exports, from 12.2 percent in 1973 to 5.8 percent in 1988.

With increased outward orientation, Chile's market share in nonfuel exports rose from 3.4 percent in 1973 to 4.4 percent in 1980, with nonfuel primary exports as well as manufactured exports participating in the expansion. After 1980, however, the overvaluation of the exchange rate led to lower market shares, 2.7 percent for nonfuel exports in 1988. Losses were experienced in nonfuel primary as well as in manufactured export shares.

The turn towards outward orientation was less pronounced in Uruguay than in Chile. And while its market share in manufactured goods increased between 1973 and 1980, the fall in its share in nonfuel primary products led to an overall slight decline, from 1.2 percent in 1973 to 1.1 percent in 1980. Uruguay's market share in the nonfuel exports of the nine economies decreased again to 0.7 percent in 1988.

VI. The Product Composition of Developing Country Exports

Tables 5, 6, and 7 show that the product composition of the manufactured exports of the developing countries to the developed countries underwent considerable changes in the 1963-88 period. These changes represent an upgrading of exports, with shifts from wood products and furniture and from the group of other industries to engineering products as well as changes in the product composition of several commodity categories.

Developing country exports of engineering products increased at an annual rate of 20.9 percent between 1963 and 1988, compared with an average rate of 15.1 percent for manufacturing as a whole. As a result, the share of engineering products in the developing country exports of manufactured goods rose from 11.6 percent in 1963 to 43.0 percent in 1988, surpassing textiles,

apparel, and leather products by 1980 ⁸

Among engineering products, the largest increases are shown for office and computing equipment (34.3 percent a year between 1963 and 1988), followed by motor vehicles (27.0 percent), radio and television (24.9 percent) and other electrical machinery (24.8 percent). The increases were the smallest in railroad equipment (1.7 percent), shipbuilding and repairing (3.7 percent), and bicycles and motorcycles (10.1 percent).

Despite the operation of the Multifiber Arrangement, the exports of textiles, apparel, and leather goods increased 13.7 percent a year between 1963 and 1988, falling short only slightly of the average increase for the manufactured exports of the developing countries. This result obtains for the 1963-73 as well as for the 1973-88 periods.

Higher than average increases are shown by wearing apparel (18.0 percent) that was supposed to be particularly affected by MFA limitations and by footwear (19.7 percent) whose imports are also restricted by some developed countries. The lowest increases were shown by spinning and weaving (8.5 percent) and by textile products (8.3 percent), where developed country competition was strong.

Developing country exports of wood products and furniture increased 11.1 percent a year between 1963 and 1988, reducing their share in the manufacturing total from 8.4 percent to 3.4 percent. At the same time, considerable upgrading is shown within this category as wood product exports rose 8.9 percent a year and furniture exports 17.4 percent a year.

⁸ Data have been expressed in 1980 prices.

Exports of paper and paper products grew at an average annual rate of 15.0 percent in the 1963-88 period, with the product group's share remaining at slightly over one percent. This category also shows an upgrading, with exports of pulp and paper rising 13.1 percent a year and those of paper products 20.4 percent a year. The corresponding figure for printing and publishing is 16.1 percent.

Developing country exports of chemicals rose 13.1 percent a year between 1963 and 1988, reducing their share in the manufacturing total from 16.0 percent to 10.2 percent. At the same time, the exports of several chemical products grew more than the manufacturing average, including synthetic resins (23.5 percent), rubber products (22.5 percent), and plastic products (19.3 percent). The laggards were the group of other chemical products (8.2 percent), basic chemicals (11.0 percent) and the group of other industrial chemicals (11.7 percent), with drugs and medicine (14.9 percent) placing in between.

The share of nonmetallic minerals in manufactured exports remained slightly above 1.5 percent, with an export growth rate of 14.8 percent in the 1963-88 period. The highest growth rate was exhibited by pottery and china (20.8 percent), followed by glass and glass products (14.7 percent), and other nonmetal products (13.1 percent).

The decline in the export share of iron and steel, from 7.4 percent in 1963 to 4.6 percent in 1988, may be explained by the limitations imposed on developing country exports first by the European Common Market and, subsequently, by the United States. No breakdown is available for this category.

Finally, with a growth rate of 12.6 percent, the export share of the category of other industries fell from 13.9 percent in 1963 to 7.9 percent in 1988. This category includes mostly labor intensive products and its decline

is part and parcel of the upgrading of developing country manufactured exports.

VII. Conclusions

This paper has examined changes in developing country nonfuel exports in the 1963-88 period. It has been shown that these exports increased more rapidly than the exports of developed countries during the period. While such was not the case between 1963 and 1973, the developing countries acquired a considerable advantage after 1973.

At the same time, the developing countries experienced an improvement in their terms of trade in the 1963-73 period but this was more than offset by a deterioration afterwards. Nevertheless, the import capacity of the developing countries grew more rapidly after 1973 than beforehand.

The paper further shows that, in the 1963-88 period, a one percent increase in the gross domestic product of the developed countries was associated with a 1.9 percent rise in their imports on nonfuel products from the developing countries. This result conflicts with the claims made by Nurkse, Prebisch, and Myrdal, according to whom developed country imports from the developing countries would increase less rapidly than their gross domestic product.

Also, while it has been alleged that import barriers in the developed countries increased after 1973, the growth of developing country exports to these countries accelerated during this period. Thus, while a one percent rise in the gross domestic product of the developed countries was associated with a 1.2 percent increase in their nonfuel imports from the developing countries in the 1963-73 period, the corresponding estimate is 2.6 percent for the 1973-88 period.

Among groups of developing countries, exports grew the most rapidly in the Far Eastern newly industrializing countries that adopted outward-oriented policies at the beginning of the period, followed by the Far Eastern newly-

exporting countries that took such a policy stance at a later point of time. Above-average increases are shown also in the Middle Eastern and Southern European NICs, several of which turned outwards and benefited from membership or association agreement with the European Common Market. Finally, its economic reforms contributed to rapid export increases in China.

By contrast, continued inward orientation led to considerable losses in export market shares in the South Asian NECs. The losses were smaller in the Latin American NICs and NECs where inward orientation predominated in much of the period. The failure of the less developed countries to turn outward also explains their losses in export market shares and, in part, the fact that they remained in an underdeveloped state.

These results are reinforced when individual countries are considered. Korea, Singapore, and Taiwan had the best export performance and India the worst, with Argentina, Brazil, and Mexico in an in between position. Changes in export market shares in Chile and Uruguay followed changes in their economic policies.

The product composition of developing country exports of manufactured goods exhibits a considerable upgrading of exports between 1963 and 1988. There was a shift from wood products and furniture and the group of other industries to engineering products as well as changes in the product composition of several commodity categories.

It is noteworthy, however, that despite the operation of the Multifiber Arrangement, developing country exports of textiles and clothing grew only slightly less than the total manufactured exports of these countries. And the exports of wearing apparel that were supposed to be particularly affected by MFA limitations increased more rapidly than the overall average.

This paper presents a more optimistic picture of developing country exports than is generally the case. At the same time, it should be added that developing countries increase their imports *pari passu* with their exports. Thus, both developed and developing countries benefit from the mutual expansion of their trade.

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TABLE 1
THE GEOGRAPHICAL AND COMMODITY COMPOSITION OF EXPORTS, 1963, 1973 AND 1987
(\$ billion, 1975 prices)

	FUELS			NONFUEL PRIMARY PRODUCTS			MANUFACTURED GOODS			NONFUEL PRODUCTS			TOTAL		
	DC	LDC	WORLD	DC	LDC	WORLD	DC	LDC	WORLD	DC	LDC	WORLD	DC	LDC	WORLD
Absolute Values															
1963															
DEVELOPED COUNTRIES	15.2	1.9	18.1	54.0	10.5	68.1	99.7	36.1	144.5	153.7	46.6	212.6	173.8	50.9	234.2
DEVELOPING COUNTRIES	45.1	16.1	63.2	31.1	6.3	41.0	4.1	3.0	7.4	35.2	9.3	48.4	80.5	25.6	111.9
MARKET ECONOMIES	60.3	18.0	81.3	85.1	16.8	109.0	103.8	39.2	151.9	188.9	55.9	261.0	254.3	76.5	346.2
1973															
DEVELOPED COUNTRIES	27.6	1.8	31.3	86.1	15.3	109.1	299.9	78.5	397.9	386.1	93.7	507.1	418.9	97.9	545.6
DEVELOPING COUNTRIES	110.4	28.9	144.3	36.5	8.9	50.9	19.3	8.5	29.0	55.8	17.4	79.9	166.8	46.6	225.3
MARKET ECONOMIES	138.1	30.8	175.7	122.7	24.2	160.1	319.2	87.0	426.9	441.9	111.1	587.0	585.7	144.5	770.9
1987															
DEVELOPED COUNTRIES	55.5	6.3	65.0	181.3	40.7	233.0	565.0	135.6	730.6	746.3	176.3	963.6	819.7	187.4	1053.8
DEVELOPING COUNTRIES	55.5	26.2	84.9	60.5	22.3	94.7	103.4	38.6	154.4	163.9	61.0	249.2	221.4	88.1	337.4
MARKET ECONOMIES	110.9	32.5	149.9	241.8	63.0	327.7	668.4	174.2	885.0	910.2	237.2	1212.7	1041.1	275.6	1391.2
Percentage Change															
1963-73															
DEVELOPED COUNTRIES	82	-7	73	59	46	60	201	117	175	151	101	139	141	92	133
DEVELOPING COUNTRIES	145	80	128	17	42	24	369	180	289	59	87	65	107	82	101
MARKET ECONOMIES	129	71	116	44	44	47	208	122	181	134	99	125	130	89	123
1973-87															
DEVELOPED COUNTRIES	101	249	107	110	167	113	88	73	84	93	88	90	96	91	93
DEVELOPING COUNTRIES	-50	-10	-41	66	151	86	435	354	433	193	250	212	33	89	50
MARKET ECONOMIES	-20	6	-15	97	161	105	109	100	107	106	113	107	78	91	80
1963-87															
DEVELOPED COUNTRIES	266	226	259	236	288	242	467	275	406	386	278	353	372	268	350
DEVELOPING COUNTRIES	23	63	34	95	256	131	2408	1172	1975	365	554	415	175	245	201
MARKET ECONOMIES	84	80	84	184	276	201	544	345	482	382	324	365	309	260	302

Sources: See Appendix.

TABLE 2
REGRESSION ANALYSIS OF DEVELOPED COUNTRY IMPORTS
FROM DEVELOPING COUNTRIES: 1963-1988
(corrected for autocorrelation)

Dependent Variables	Constant	t- values		GDP	t- values		Relative Prices	t values		Adjusted R squares	Auto- Correlation
NONFUEL EXPORTS	-3.77	-5.25	**	1.86	21.53	**	-0.53	2.43	*	0.956	0.53
NONFUEL PRIMARY EXPORTS	5.59	16.45	**	0.67	15.59	**	-0.47	-6.14	**	0.951	0.25
FOOD AND BEVERAGES	4.08	7.18	**	0.76	11.06	**	-0.67	-7.11	**	0.893	0.52
INDUSTRIAL MATERIALS	6.09	10.54	**	0.50	6.83	**	-0.18	-1.56		0.798	0.25
NONFERROUS METALS	-0.71	-0.97		1.20	13.20	**	-0.06	-0.78		0.914	0.38
MANUFACTURED EXPORTS	-22.44	-23.79	**	3.96	33.30	**	-0.89	-3.90	**	0.991	0.59
FUELS	7.41	2.93	**	0.55	1.83	+	-0.18	-2.51	*	0.254	0.85
TOTAL EXPORTS	2.21	1.83	+	1.25	8.79	**	-0.28	-4.05	**	0.779	0.81

Notes: Equations are in log-linear form.
Significance level: ** 1%, * 5%, + 10%.

Sources: See Appendix.

TABLE 2a
REGRESSION ANALYSIS OF DEVELOPED COUNTRY IMPORTS
FROM DEVELOPING COUNTRIES: 1963-1973
(corrected for autocorrelation)

Dependent Variables	Constant	t- values		GDP	t- values		Relative Prices	t- values		Adjusted R squares	Auto- Correlation
NONFUEL EXPORTS	1.78	7.39	**	1.20	45.17	**	0.15	1.42		0.997	-0.41
NONFUEL PRIMARY EXPORTS	5.96	8.38	**	0.63	7.41	**	-0.33	-2.00	+	0.887	0.30
FOOD AND BEVERAGES	6.00	39.38	**	0.53	29.43	**	-0.53	-14.28	**	0.992	-0.60
INDUSTRIAL MATERIALS	4.92	5.64	**	0.65	5.90	**	-0.18	-0.90		0.849	0.23
NONFERROUS METALS	-0.47	-0.21		1.17	4.28	**	-0.01	-0.04		0.735	0.33
MANUFACTURED EXPORTS	-19.63	-9.33	**	3.59	13.32	**	-1.56	-2.54	*	0.982	0.62
FUELS	-2.83	-3.59	**	1.81	22.24	**	-0.28	-2.68	*	0.988	0.00
TOTAL EXPORTS	-0.37	-0.75		1.57	27.64	**	-0.27	-2.04	+	0.991	-0.09

Notes: Equations are in log-linear form.
Significance level: ** 1%, * 5%, + 10%.

Sources: See Appendix.

TABLE 2b
REGRESSION ANALYSIS OF DEVELOPED COUNTRY IMPORTS
FROM DEVELOPING COUNTRIES: 1974-1988
(corrected for autocorrelation)

Dependent Variables	Constant	t- values	GDP	t- values	Relative Prices	t- values	Adjusted R squares	Auto- Correlation
NONFUEL EXPORTS	-9.66	-10.81 **	2.57	22.94 **	-0.26	-1.44	0.990	0.12
NONFUEL PRIMARY EXPORTS	1.86	1.28	1.12	6.26 **	-0.23	-1.74	0.951	0.21
FOOD AND BEVERAGES	1.75	0.82	1.04	3.99 **	-0.59	3.41 **	0.901	0.35
INDUSTRIAL MATERIALS	-0.41	-0.15	1.29	3.86 **	0.27	1.20	0.761	0.27
NONFERROUS METALS	-0.75	-0.70	1.20	9.16 **	-0.14	-1.85 +	0.933	-0.02
MANUFACTURED EXPORTS	22.41	31.62 **	3.98	47.51 **	-0.52	3.31 **	0.995	0.14
FUELS	23.53	6.44 **	-1.34	-3.11 **	-0.22	1.95 +	0.536	0.64
TOTAL EXPORTS	7.53	4.55 **	0.62	3.18 **	-0.36	-3.21 **	0.611	0.45

Notes: Equations are in log-linear form.
Significance level: ** 1%, * 5%, + 10%.

Sources: See Appendix.

TABLE 2c
TEST THE EQUALITY OF GDP ELASTICITIES OF IMPORTS
BETWEEN 1963-73 PERIOD AND 1974-88 PERIOD

Dependent Variables	GDP 1963-73 values		GDP 1974-88 values		Relative Prices 1963-73	t- values	Relative Prices 1974-88	t- values	F statistics equal GDP elasticity	Test Result
NONFUEL EXPORTS	1.20	17.06 **	2.57	28.33 **	0.15	0.71	-0.26	-1.79 +	149.8	** Not Equal
NONFUEL PRIMARY EXPORTS	0.63	7.26 **	1.12	6.74 **	-0.36	-2.00 +	-0.22	-1.88 +	7.16	* Not Equal
FOOD AND BEVERAGES	0.57	4.17 **	1.05	5.11 **	-0.45	-2.21 *	0.59	-4.21 **	3.94	+ Not Equal
INDUSTRIAL MATERIALS	0.61	4.53 **	1.29	4.32 **	-0.24	-1.02	0.26	1.34	4.47	* Not Equal
NONFERROUS METALS	1.16	6.42 **	1.21	5.60 **	0.04	0.23	-0.10	-0.87	0.03	Equal
MANUFACTURED EXPORTS	3.57	16.60 **	3.98	22.79 **	-1.64	-2.86 **	-0.60	-2.32 *	2.24	Equal
FUELS	1.89	6.14 **	-1.33	-4.06 **	-0.35	1.43	-0.22	2.45 *	45.02	** Not Equal
TOTAL EXPORTS	1.58	11.68 **	0.62	4.10 **	-0.35	-1.47	-0.38	-4.13 **	21.62	** Not Equal

Notes: Equations are in log-linear form.

Significance level: ** 1%, * 5%, + 10%.

Constant terms are not shown in the table.

Due to the introduction of dummy variables and autoregressive transformation, coefficient estimates are slightly different from the estimates obtained for each subperiods separately.

Sources: See Appendix.

TABLE 3
EXPORTS BY GROUPS OF DEVELOPING COUNTRIES, 1963, 1973, 1980 AND 1988
(\$ billion, 1975 prices, percent)

----- YEAR=1963 -----										
	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%
NIC LATIN AMERICA	0.39	0.7	8.06	21.7	0.31	7.4	8.37	20.2	8.76	9.3
FAR EAST	0.21	0.4	0.70	1.9	0.92	21.9	1.62	3.9	1.84	2.0
MIDDLE EAST & S.EUROPE	0.33	0.6	3.51	9.4	0.93	22.2	4.45	10.7	4.77	5.1
SOUTH AFRICA	0.10	0.2	2.23	6.0	0.25	5.9	2.48	6.0	2.58	2.7
NEC LATIN AMERICA	11.17	21.2	2.89	7.8	0.06	1.4	2.95	7.1	14.11	15.0
FAR EAST	1.38	2.6	2.36	6.3	0.11	2.7	2.47	6.0	3.85	4.1
N.AFRICA & MIDDLE EAST	0.64	1.2	1.29	3.5	0.07	1.8	1.36	3.3	2.01	2.1
SOUTH ASIA	0.03	0.0	2.51	6.7	0.80	18.9	3.30	8.0	3.33	3.5
LDC CHINA	0.01	0.0	0.45	1.2	0.12	2.9	0.57	1.4	0.58	0.6
LATIN AMERICA	4.68	8.9	3.03	8.1	0.20	4.7	3.23	7.8	7.91	8.4
ASIA	0.19	0.4	2.42	6.5	0.07	1.6	2.49	6.0	2.67	2.8
MIDDLE EAST	27.73	52.7	0.44	1.2	0.14	3.2	0.58	1.4	28.31	30.1
AFRICA	5.80	11.0	7.33	19.7	0.23	5.4	7.55	18.2	13.35	14.2
DEVELOPING COUNTRIES TOTAL	52.66	100.0	37.21	100.0	4.21	100.0	41.42	100.0	94.09	100.0
----- YEAR=1973 -----										
	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%
NIC LATIN AMERICA	0.17	0.2	9.99	21.0	2.78	10.0	12.77	16.9	12.94	7.0
FAR EAST	0.88	0.8	1.78	3.7	11.18	40.2	12.96	17.2	13.84	7.4
MIDDLE EAST & S.EUROPE	1.42	1.3	5.50	11.5	6.76	24.3	12.26	16.3	13.68	7.4
SOUTH AFRICA	0.14	0.1	2.74	5.8	0.65	2.4	3.40	4.5	3.53	1.9
NEC LATIN AMERICA	8.58	7.8	2.98	6.2	0.28	1.0	3.25	4.3	11.83	6.4
FAR EAST	5.60	5.1	6.07	12.7	0.80	2.9	6.87	9.1	12.47	6.7
N.AFRICA & MIDDLE EAST	0.46	0.4	1.31	2.8	0.25	0.9	1.57	2.1	2.02	1.1
SOUTH ASIA	0.03	0.0	1.78	3.7	1.75	6.3	3.53	4.7	3.56	1.9
LDC CHINA	0.15	0.1	1.34	2.8	1.00	3.6	2.35	3.1	2.50	1.3
LATIN AMERICA	5.66	5.1	3.06	6.4	0.85	3.1	3.92	5.2	9.57	5.1
ASIA	1.03	0.9	1.99	4.2	0.39	1.4	2.38	3.2	3.41	1.8
MIDDLE EAST	62.87	56.9	0.63	1.3	0.54	1.9	1.17	1.6	64.05	34.5
AFRICA	23.49	21.3	8.45	17.7	0.55	2.0	9.00	11.9	32.49	17.5
DEVELOPING COUNTRIES TOTAL	110.49	100.0	47.62	100.0	27.79	100.0	75.42	100.0	185.90	100.0

TABLE 3
EXPORTS BY GROUPS OF DEVELOPING COUNTRIES, 1963, 1973, 1980 AND 1988
(\$ billion, 1975 prices, percent)

YEAR=1980										
	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%
NIC LATIN AMERICA	2.75	3.2	11.15	20.0	5.68	9.1	16.83	14.2	19.58	9.6
FAR EAST	0.72	0.8	2.35	4.2	25.28	40.5	27.64	23.4	28.36	13.9
MIDDLE EAST & S.EUROPE	0.48	0.6	6.02	10.8	13.54	21.7	19.56	16.6	20.04	9.8
SOUTH AFRICA	0.36	0.4	3.67	6.6	2.83	4.5	6.50	5.5	6.86	3.4
NEC LATIN AMERICA	3.77	4.4	4.20	7.5	0.53	0.9	4.73	4.0	8.50	4.2
FAR EAST	6.21	7.2	10.00	18.0	3.49	5.6	13.49	11.4	19.70	9.7
N.AFRICA & MIDDLE EAST	1.22	1.4	1.37	2.5	0.95	1.5	2.31	2.0	3.53	1.7
SOUTH ASIA	0.04	0.0	1.69	3.0	2.99	4.8	4.68	4.0	4.72	2.3
LDC CHINA	0.93	1.1	1.57	2.8	2.38	3.8	3.95	3.3	4.88	2.4
LATIN AMERICA	3.10	3.6	3.89	7.0	1.53	2.5	5.42	4.6	8.52	4.2
ASIA	1.24	1.5	1.27	2.3	0.67	1.1	1.94	1.6	3.18	1.6
MIDDLE EAST	45.57	53.2	0.50	0.9	1.09	1.7	1.59	1.3	47.16	23.1
AFRICA	19.33	22.5	8.00	14.4	1.53	2.4	9.52	8.1	28.85	14.2
DEVELOPING COUNTRIES TOTAL	85.72	100.0	55.68	100.0	62.49	100.0	118.16	100.0	203.88	100.0
YEAR=1988										
	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%	BIL. US\$	%
NIC LATIN AMERICA	3.58	6.2	16.29	22.2	16.14	11.3	32.43	15.0	36.01	13.1
FAR EAST	0.94	1.6	5.08	6.9	63.39	44.4	68.46	31.6	69.41	25.3
MIDDLE EAST & S.EUROPE	1.70	2.9	11.00	15.0	25.90	18.1	36.90	17.1	38.61	14.1
SOUTH AFRICA	0.50	0.9	3.72	5.1	1.52	1.1	5.24	2.4	5.74	2.1
NEC LATIN AMERICA	4.45	7.7	4.51	5.9	1.08	0.8	5.39	2.5	9.84	3.6
FAR EAST	5.75	9.9	11.73	16.0	9.55	6.7	21.28	9.8	27.04	9.8
N.AFRICA & MIDDLE EAST	1.09	1.9	1.47	2.0	1.68	1.2	3.15	1.5	4.24	1.5
SOUTH ASIA	0.19	0.3	2.06	2.8	5.50	3.8	7.56	3.5	7.75	2.8
LDC CHINA	1.65	2.8	4.19	5.7	9.97	7.0	14.15	6.5	15.80	5.8
LATIN AMERICA	1.03	1.8	4.27	5.8	2.69	1.9	6.97	3.2	7.99	2.9
ASIA	0.70	1.2	1.16	1.6	1.18	0.8	2.34	1.1	3.04	1.1
MIDDLE EAST	23.78	40.9	0.83	1.1	1.94	1.4	2.76	1.3	26.55	9.7
AFRICA	12.72	21.9	7.43	10.1	2.35	1.6	9.77	4.5	22.49	8.2
DEVELOPING COUNTRIES TOTAL	58.10	100.0	73.53	100.0	142.88	100.0	216.41	100.0	274.51	100.0

Notes: Imports of developed countries from developing countries are used.

Sources: See Appendix.

TABLE 4
EXPORTS BY SELECTED DEVELOPING COUNTRIES, 1963, 1973, 1980 AND 1988
(\$ million, 1975 prices)

YEAR=1963

	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT
KOREA	17	1.0	99	0.8	85	2.6	184	1.2	201	1.1
SINGAPORE	1266	70.0	1302	10.2	764	23.5	2066	12.9	3332	18.7
TAIWAN	21	1.1	464	3.6	274	8.4	737	4.6	758	4.3
ARGENTINA	75	4.1	2878	22.6	171	5.3	3049	19.1	3124	17.6
BRAZIL	63	3.5	3058	24.0	98	3.0	3155	19.8	3218	18.1
MEXICO	257	14.2	1490	11.7	320	9.8	1809	11.3	2067	11.6
INDIA	107	5.9	1996	15.7	1477	45.5	3473	21.7	3580	20.1
CHILE	0	0.0	1090	8.6	48	1.5	1137	7.1	1137	6.4
URUGUAY	1	0.1	350	2.7	12	0.4	362	2.3	363	2.0
TOTAL	1808	100.0	12725	100.0	3248	100.0	15974	100.0	17782	100.0

YEAR=1973

	FUELS		NONFUEL PRIMARY PRODUCTS		MANUFACTURED GOODS		NONFUEL PRODUCTS		TOTAL	
	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT	MIL. US\$	PERCENT
KOREA	119	3.8	587	3.5	3419	21.0	4006	12.1	4125	11.4
SINGAPORE	2400	77.6	1521	9.0	2113	13.0	3634	10.9	6034	16.6
TAIWAN	47	1.5	867	5.1	4639	28.5	5506	16.6	5553	15.3
ARGENTINA	19	0.6	3149	18.6	926	5.7	4075	12.3	4094	11.3
BRAZIL	280	9.1	5960	35.2	1688	10.4	7648	23.0	7928	21.8
MEXICO	84	2.7	1759	10.4	1393	8.6	3152	9.5	3236	8.9
INDIA	133	4.3	1683	9.9	1982	12.2	3665	11.0	3797	10.5
CHILE	9	0.3	1082	6.4	58	0.4	1140	3.4	1149	3.2
URUGUAY	3	0.1	335	2.0	67	0.4	402	1.2	405	1.1
TOTAL	3093	100.0	16942	100.0	16286	100.0	33229	100.0	36321	100.0

TABLE 4
EXPORTS BY SELECTED DEVELOPING COUNTRIES, 1963, 1973, 1980 AND 1988
(\$ million, 1975 prices)

YEAR=1980															
	FUELS			NONFUEL PRIMARY PRODUCTS			MANUFACTURED GOODS			NONFUEL PRODUCTS			TOTAL		
	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT
KOREA		11	0.2		1073	4.6		10108	26.0		11182	18.0		11193	16.5
SINGAPORE		1672	30.0		2683	11.5		6736	17.3		9419	15.2		11091	16.4
TAIWAN		98	1.8		1309	5.6		11240	28.9		12549	20.2		12647	18.7
ARGENTINA		95	1.7		3718	16.0		1198	3.1		4916	7.9		5011	7.4
BRAZIL		122	2.2		7620	32.8		5007	12.9		12627	20.3		12749	18.8
MEXICO		3534	63.5		2043	8.8		1187	3.1		3230	5.2		6764	10.0
INDIA		.1	0.2		1943	8.4		2851	7.3		4794	7.7		4805	7.1
CHILE		20	0.4		2428	10.4		287	0.7		2714	4.4		2735	4.0
URUGUAY		0	0.0		422	1.8		261	0.7		682	1.1		682	1.0
TOTAL		5565	100.0		23239	100.0		38874	100.0		62113	100.0		67678	100.0

YEAR=1988															
	FUELS			NONFUEL PRIMARY PRODUCTS			MANUFACTURED GOODS			NONFUEL PRODUCTS			TOTAL		
	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT	MIL	US\$	PERCENT
KOREA		363	4.1		2605	7.7		34360	30.7		36965	25.4		37328	24.2
SINGAPORE		2982	34.0		3860	11.4		17670	15.8		21531	14.8		24513	15.9
TAIWAN		221	2.5		3409	10.1		33696	30.1		37105	25.5		37326	24.2
ARGENTINA		85	1.0		4750	14.0		1755	1.6		6506	4.5		6591	4.3
BRAZIL		851	9.7		11038	32.6		9800	8.8		20838	14.3		21689	14.0
MEXICO		3885	44.3		1779	5.3		7024	6.3		8803	6.0		12689	8.2
INDIA		335	3.8		2524	7.5		6530	5.8		9054	6.2		9388	6.1
CHILE		37	0.4		3278	9.7		642	0.6		3920	2.7		3956	2.6
URUGUAY		2	0.0		583	1.7		401	0.4		984	0.7		987	0.6
TOTAL		8761	100.0		33826	100.0		111879	100.0		145705	100.0		154466	100.0

Sources: See Appendix.

TABLE 5
GROWTH RATES OF MANUFACTURED EXPORTS OF DEVELOPING COUNTRIES
TO DEVELOPED COUNTRIES: EIGHT INDUSTRIAL CATEGORIES
(1980 prices)

	1963-73	1973-88	1963-88
32 Textiles, Apparel, Leather	19.4	10.0	13.7
33 Wood Products & Furniture	17.2	7.2	11.1
34 Paper & Paper Products	20.7	11.4	15.0
35 Chemicals	18.7	9.6	13.1
36 Non-Metallic Mineral Products	20.1	11.4	14.8
37 Iron & Steel	19.8	8.7	13.0
38 Engineering Products	27.3	16.8	20.9
39 Other Industries	24.5	5.4	12.6
Total Manufactures	21.1	11.3	15.1

Note: Imports of developed countries from developing countries.

Sources: See Appendix.

TABLE 6
GROWTH RATES OF MANUFACTURED EXPORTS OF DEVELOPING COUNTRIES
TO DEVELOPED COUNTRIES: THIRTY-THREE INDUSTRIAL CATEGORIES
(1980 prices)

	1963-73	1973-88	1963-88
3211 Spinning, Weaving, etc.	14.0	5.0	8.5
321-3211 Textile Products	14.6	4.3	8.3
322 Wearing Apparel	26.8	12.4	18.0
323 Leather & Leather Products	17.0	7.7	11.3
324 Footwear	28.6	14.1	19.7
331 Wood Products	16.5	4.2	8.9
332 Furniture & Fixtures	21.4	14.8	17.4
3411 Pulp, Paper & Paper Products	13.2	13.0	13.1
341-3411 Paper Products	34.4	12.0	20.4
342 Printing & Publishing	25.7	10.2	16.1
3511 Basic Chemicals, excl. Fert.	14.7	8.6	11.0
3513 Synthetic Resins	30.5	19.0	23.5
351-3511-3513 Other Indus. Chemi.	18.7	7.3	11.7
3522 Drugs & Medicine	23.2	9.7	14.9
352-3522 Other Chemical Products	12.0	5.7	8.2
355 Rubber Products	38.2	13.0	22.5
356 Plastic Products	35.3	9.7	19.3
361 Pottery, China etc.	29.0	15.6	20.8
362 Glass & Glass Products	21.0	10.7	14.7
369 Other Non-Metal Products	17.8	10.1	13.1
371 Iron & Steel	19.8	8.7	13.0
381 Fabricated Metal Products	23.3	13.6	17.4
3825 Office, Computing Equipments	51.8	23.8	34.3
382-3825 Other Machinery	25.7	16.3	20.0
3832 Radio, Television	33.6	19.4	24.9
383-3832 Other Electric Machinery	40.9	15.1	24.8
3841 Shipbuilding and Repairing	14.9	-3.2	3.7
3842 Railroad Equipment	36.0	-16.2	1.7
3843 Motor vehicles	39.9	19.1	27.0
3845 Aircraft	12.4	14.1	13.4
3844+3849 Bicycles, Motor cycles	44.1	-8.0	10.1
385 Professional Goods	31.2	16.8	22.4
390 Other Industries	24.5	5.4	12.6
Total Manufactures	21.1	11.3	15.1

Note: Imports of developed countries from developing countries.

Sources: See Appendix.

TABLE 7
 SHARES OF MANUFACTURED EXPORTS OF DEVELOPING COUNTRIES
 TO DEVELOPED COUNTRIES: EIGHT INDUSTRIAL CATEGORIES
 (percent)

	1963	1973	1980	1988
32 Textiles, Apparel, Leather	39.8	34.0	33.1	28.3
33 Wood Products & Furniture	8.4	5.9	3.8	3.4
34 Paper & Paper Products	1.2	1.1	1.1	1.1
35 Chemicals	16.0	12.9	10.9	10.2
36 Non-Metallic Mineral Products	1.7	1.5	1.5	1.6
37 Iron & Steel	7.4	6.5	4.9	4.6
38 Engineering Products	11.6	20.0	33.9	43.0
39 Other Industries	13.9	18.0	10.8	7.9
Total Manufactures	100.0	100.0	100.0	100.0

Sources: See Appendix.

APPENDIX

1. DEFINITION OF COUNTRY GROUPS

Except in Table 1, where United Nations' definition (see note) is used, the following definitions are used.

DEVELOPED COUNTRIES Australia, Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, Germany F.R., Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and United States.

CENTRALLY PLANNED ECONOMIES Albania, Bulgaria, Cuba, Czechoslovakia, Germany D.R., Hungary, Korea D.P.R., Mongolia, Poland, Romania, Vietnam, and Soviet Union.

ALL DEVELOPING COUNTRIES Residuals defined as
World - Developed Countries - Centrally Planned Economies.

NICs (Newly Industrializing Countries)

LATIN AMERICA Argentina, Brazil, Chile, Mexico, and Uruguay.

FAR EAST Hong Kong, Korea, Singapore, and Taiwan.

MIDDLE EAST & SOUTH EUROPE Greece, Israel, Portugal, Spain, Turkey, and Yugoslavia.

SOUTH AFRICA South Africa.

NECs (Newly Exporting Countries)

LATIN AMERICA Colombia, Costa Rica, Guatemala, Peru, and Venezuela.

FAR EAST Indonesia, Malaysia, Philippines, and Thailand.

NORTH AFRICA & MIDDLE EAST Egypt, Jordan, Morocco, and Tunisia.

SOUTH ASIA Bangladesh, India, Pakistan, and Sri Lanka.

LDCs (Less Developed Countries)

CHINA China.

LATIN AMERICA all other Latin American countries and territories.

ASIA all other Asian countries and territories.

MIDDLE EAST all other Middle Eastern countries and territories.

AFRICA all other African countries and territories.

Note: In "World exports by commodity classes and by regions" published in UN Monthly Bulletin of Statistics, developed countries consist of Western Europe, United States, Canada, Japan, Australia, New Zealand, and South Africa; Western Europe includes EEC, EFTA, and Turkey, but Yugoslavia is also included until 1984. Centrally planned economies consist of Eastern Europe, Soviet Union, Korea D.P.R., Mongolia, and Vietnam. China was formerly included in this category. Developing countries are all other countries.

2. SOURCES OF TRADE DATA

For TABLE 1

Trade matrix published in UN Monthly Bulletin of Statistics.

For TABLE 3

Aggregated import data of developed countries from UN COMTRADE data base. Imports from all (233) individual countries or territories are aggregated.

For TABLE 4

Aggregated export data from UN COMTRADE data base, supplemented by aggregated export data from the World Bank for recent years when UN data are not available.

For TABLES 2, 2A, 2B, 2C, TABLE 5, TABLE 6, and TABLE 7

Disaggregated data (SITC 5 digits, Revisions 1 and 2) of developed country imports from developing countries taken from UN COMTRADE data base. SITC Rev.2 data are used for 1988; for years 1963-1987, SITC Rev.1 data. For manufacturing trade, each manufacturing sector (in terms of ISIC) is defined by a set of SITC 5-digit items.

3. SOURCES OF PRICE DATA

For TABLE 1, TABLE 3, and TABLE 4

PRIMARY GOODS 1975 base aggregated price indexes of developed countries and developing countries are calculated for 4 aggregates (SITC 0+1, SITC 2+4, SITC 3, and SITC 68) from the export prices of primary commodities published in UN Monthly Bulletin of Statistics. Price data from FAO Production Yearbook are also used in order to extend 1975 base indexes to earlier years that are covered by 1970 base indexes, which use a different basket of commodities.

MANUFACTURED GOODS Unit value indexes of manufactured goods of developed and developing countries published in UN Monthly Bulletin of Statistics. LDC's index is corrected for non-ferrous metals (SITC 68) by using the price index of SITC 68 described above; UN definition of manufactured goods is the sum of SITC sections 5 through 8.

For TABLES 2, 2A, 2B, 2C, TABLE 5, TABLE 6, and TABLE 7

PRIMARY GOODS the export prices of primary commodities published in UN Monthly Bulletin of Statistics are used directly to deflate individual commodities when major export goods are concerned. For other commodities, deflators for SITC 2-digit items (or SITC 2-digit items after the subtraction of major export goods) are constructed using 1980 export weights of developing countries.

MANUFACTURED GOODS : the following 3 set of price indexes published by US Bureau of Labor Statistics are combined to construct the deflators for 33 manufacturing sectors:

- (1) producer price indexes by commodity group,
- (2) import price indexes by SIC, and
- (3) import price indexes by SITC.

Series (1) are discontinued after 1983, series (2) are available for 1980-1987 period. Series (3) have replaced series (2) in the latest publication (Handbook of Labor Statistics, 1988).

Depending on the availability of individual price series, series (1) are used for 1963-1980, or 1963-1982, then series (2) are used to extend the deflators to 1987. Series (3) are used to further extend the manufacturing deflators to 1988.

4. SOURCES OF GDP DATA

GDP data from the World Bank and exchange rate data from the IMF for 20 developed countries are used to construct 1975 base aggregate GDP series of developed countries.

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